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(54) Abstract Title
Credit for viewers of internet or interactive tv broadcasts

(57) A credit transfer system, associated with a television or internet receiver transmits tokens to a portable consumer unit. The user may need to press a function key on the unit to earn advertising coupons which are transmitted for a brief period, identified by a visual or audio command. The user may be a mobile phone or a PDA and collect loyalty points via an optical, acoustic, short range radio or wired link. The system may use secure authentication such as public private key encryption in transferring credit.

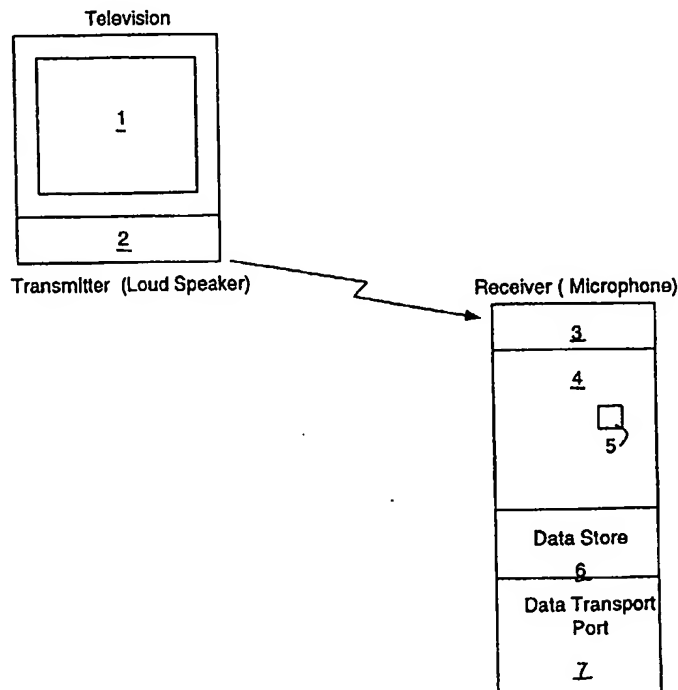


Fig 1

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GB 2 370 946 A

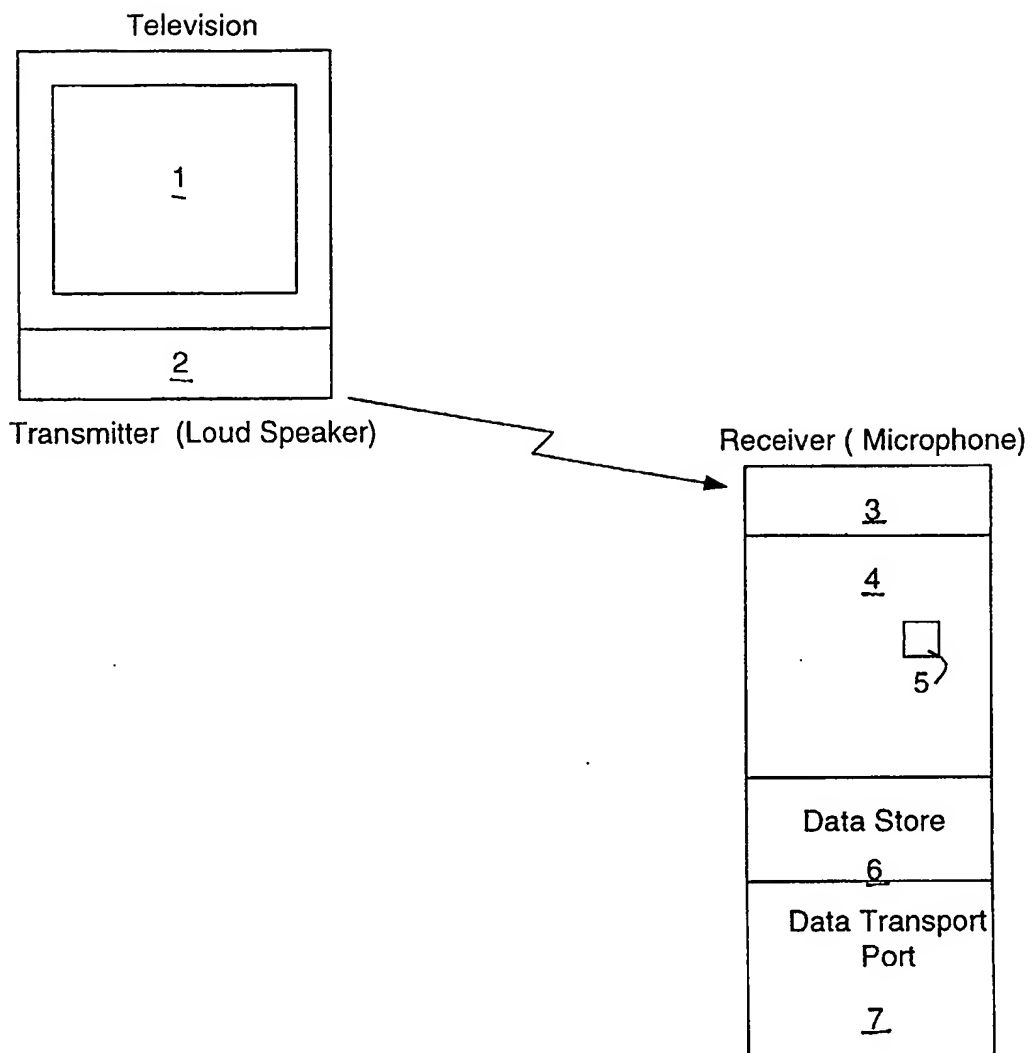


Fig 1

Improvements in or relating to credit transfer
systems.

This invention relates to credit transfer systems and more especially but not exclusively it relates credit transfer systems provided for the purpose of product or services promotion in connection with commercial television broadcasts or internet advertisements.

When advertising on commercial television, for example, it is important to optimise viewer numbers and viewer interest in the advertisement concerned. This is presently achieved, at least in part, by attention to a number of factors including, the time of transmission, and preceding/following program popularity. However, even if factors such as these are optimised, there tends to be an undesirable lapse of viewer attention during advertisements which may be manifested by habitual channel surfing during commercial breaks or simply by mental disconnection and lack of interest.

It is an object of this invention to provide an incentive for viewers to be attentive, during commercial television transmissions, to advertisements.

According to the present invention, a credit transfer system suitable for the purpose of product or services promotion to viewers of commercial television advertisement broadcasts or internet transmissions, comprises, in association with a television or internet receiver, a data transmission system which is operative, consequent upon reception by the receiver of predetermined data, to transmit credit transfer data signals, a

portable consumer operated unit which embodies a data receiver for receiving the credit transfer data signals when the unit is appropriately enabled by a viewer, a store forming a part of the unit in which received credits are accumulated, and means for downloading from the store accumulated credits to the benefit of a third party account.

Thus in a system according to the invention, appropriate data can be downloaded from the said unit at a sales outlet, for the purpose of giving a discount which is credited to the third party account if and when the goods or services advertised are purchased.

The enable function (which may simply comprise the pressing by a viewer of a function key on the unit) serves to enable reception of credit data signals which are transmitted for a brief period only, the period being identified to the viewer by means of an audio/visual command such as, *'press function key now to store credit token'*, for example.

It will be apparent that a system according to the invention serves to provide an incentive for viewers to be attentive to advertisements, during commercial television transmissions as well as providing statistical data appertaining to consumer interest.

The portable consumer operated unit may be a viewer's mobile phone which is adapted to receive the credit transfer data signals radiated from the television when the phone is enabled for this purpose by a viewer.

Alternatively the portable consumer operated unit may be a Personal Digital Assistant (PDA), or a loyalty token device provided to promote the product or service concerned, adapted to

receive the credit transfer data signals radiated from the television when enabled for this purpose by a viewer.

The data transmission system may comprise a short range radio data link such as Blue Tooth, or alternatively it may comprise an acoustic data link, or an optical data link, or a hard wired data link, or a system which exploits unintentionally radiated emissions from the broadcast receiver based on modulating these emissions.

One embodiment of the invention will now be described by way of example only, with reference to the accompanying drawing which is a somewhat schematic block diagram of a credit transfer system as applied to a television receiver.

Referring now to the drawing, a credit transfer system provided for the purpose of product or services promotion in connection with commercial television broadcasts, comprises a television receiver 1, which embodies an acoustic data transmitter 2, which in this example conveniently utilises an existing speaker in the television 1. Advertisements received by the television receiver 1, are accompanied by data defining credit tokens. The acoustic transmitter 2, serves for the transmission of this data, which appertains to credit token value and product description, to an acoustic receiver 3, which is utilised to receive the audio data signals and which includes a microphone which conveniently forms an existing part of a viewer's mobile phone 4. The phone includes a function key 5, which must be pressed by the viewer/user in order to store data corresponding to a credit and the products to which they relate, in a data store 6, provided for this purpose in the mobile phone 4. In order to facilitate downloading or interrogation of the store contents, a data transfer

or transport port 7, is provided. The port 7, is arranged to communicate with a complementary port (not shown) in a till at a sales outlet, so that when products are purchased at the sales outlet, which correspond to stored credit tokens, an appropriate credit can be given to the purchaser in possession of the phone 4. It will be appreciated that although in this example data transfer between the television is effected by acoustic means, various other alternative communication media are possible such as systems using an optical link, or a hard wired link, or an RF link such as Bluetooth for example.

Thus, in operation of the system, a television advertisement for a product provides data which is encrypted, time stamped and verified and which corresponds to a credit token, transfer of the credit token from the television 1, to the mobile phone 4 being effected by Blue Tooth, only if the function key 5, on the phone is pressed at an appropriate time as indicated by a screen flash during the advert.

It will be appreciated that trigger data associated with adverts, is only valid during a limited download period, and an authentication link is envisaged via verification against network time standard such as GET, and by decrypting by a public/private key system held within the phone.

Various modifications may be made to the system as just before described without departing from the scope of the invention and for example the transmission system may be optical or acoustic and may equally well be used in applications other than television such as the internet for example.

CLAIMS.

1. A credit transfer system comprising in association with a television or internet receiver, a data transmission system which is operative, consequent upon reception by the receiver of predetermined data, to transmit credit transfer data signals, a portable consumer operated unit which embodies a data receiver for receiving the credit transfer data signals when the unit is appropriately enabled by a viewer, a store forming a part of the unit in which received credits are accumulated, and means for downloading from the store accumulated credits to the benefit of a third party account.
2. A system as claimed in Claim 1, wherein the enable function comprises the pressing by a viewer of a function key on the unit thereby to enable reception and storage of credit data signals which are transmitted for a brief period only, the period being identified to the viewer by means of an audio/visual command.
3. A system as claimed in Claim 1, or Claim 2, wherein the portable consumer operated unit is a mobile phone which is adapted to receive the credit transfer data signals radiated from the television when the phone is enabled for this purpose by a viewer.
4. A system as claimed in Claim 1, or Claim 2, wherein the portable consumer operated unit is a PDA which is adapted to receive the credit transfer data signals radiated from the television when the PDA is enabled for this purpose by a viewer.
5. A system as claimed in Claim 1, or Claim 2, wherein the portable consumer operated unit is a loyalty token device which is

adapted to receive the credit transfer data signals radiated from the television when the device is enabled for this purpose by a viewer.

6. A system as claimed in any preceding claim, wherein the data transmission system comprises a short range radio data link.
7. A system as claimed in of Claims 1 to 5, wherein the data transmission system comprises an optical data link.
8. A system as claimed in of Claims 1 to 5, wherein the data transmission system comprises an acoustic data link.
9. A system as claimed in of Claims 1 to 5, wherein the data transmission system comprises a wired data link.
10. A system as claimed in any preceding claim, comprising the use of a secure authentication mechanism using electronic network time,
11. A system as claimed in any preceding claim, comprising the use of a secure authentication route using public/private key encryption with this service.
12. A system substantially as hereinbefore described with reference to the accompanying drawing.
13. A system as claimed in any preceding claim used for the purpose of product or services promotion to viewers of commercial television advertisement broadcasts or internet transmissions,



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Claims searched: 1-13

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Date of search: 2 October 2001

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK Cl (Ed.S): H4L (LRCMC, LRNMB, LDPA, LDPPX, LDPD, LESF, LECCP, LDGX), G4V (VAK)
Int Cl (Ed.7): H04M 15/00, H04N 7/173, H04Q 7/22
Other: Online: WPI, EPODOC, JAPIO, INSPEC

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A, E	GB 2357664 A (NOKIA) See abstract	-
Y	EP 1003344 A2 (NORTEL) See abstract	1-3, 5, 13
Y	EP 0921696 A1 (SONY) See abstract	1-3, 5, 13
X, E	WO 01/24067 A1 (DISCOUNTNET) See abstract and page 20 paragraph 2.	1, 2
A	WO 99/66727 A1 (OPENTV) See abstract	-

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.